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“The Judges faced a hard task in identifying the Young Design Engineer of the Year, where five strong entries ensured a long discussion.”

*Graham Pitcher,
Group Editor,
Findlay Media
Engineering Design Division*

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Changing lives for the better

Whether at work or mentoring schoolchildren,
our Grand Prix winner is making a difference.



**“The importance
of engineers in
the design
process is
highlighted
again in this
year’s British
Engineering
Excellence
Awards.”**

Engineering is a people business. No matter what the product, a designer or a design team is behind it and nothing sees the light of day without that human touch.

The importance of this human touch is highlighted again in this year’s British Engineering Excellence Awards. The winner of the Grand Prix is our Design Engineer of the Year, Sebastian Cuvelier Musallian. He has made a significant contribution to product development at a leading UK design consultancy focusing on healthcare, where his aim is to make a difference to people’s lives through good design and engineering solutions.

French-born Sebastian has worked in the UK since graduating in 2002 with a Honours degree in Electronics and Computer Engineering. He has shown a strong track record of developing complex products and of leading multi-disciplinary teams.

Latterly, he was lead engineer for the OrganOx liver perfusion system – winner of the Design Team of the Year Award at last year’s BEEAs – and takes the time to work with schoolchildren to highlight engineering and in student groups in the Engineers Without Borders scheme,

He was selected to receive the Grand Prix unanimously – the first time this has happened in BEEAs history.

The Judges faced a hard task in identifying the Young Design Engineer of the Year, where five strong entries ensured a long discussion. But Jack Bolton won the day.

Jack’s entry showed a willingness to acquire new skills – often by teaching himself. He is engaged with the engineering community and constantly pushes and promotes engineering inside and outside his job. He is a member of the Chelmsford Science and Engineering Society and is president of its younger branch, Future Engineers and Scientists.

He is, as the Judges agreed, an outstanding entrant in the most fiercely competitive category.

Please join me in congratulating everyone who entered this year’s BEEAs and, in particular, our winners.

The right prescription

Making a difference to people's lives through good design and engineering solutions

The winner of the Grand Prix at the British Engineering Excellence Awards is selected from the winners of each category. But how do you compare and contrast an Electronic Product with a Young Engineer; a Design Team with a Start Up and so on? It's a difficult task, as the Judges for the BEEAs find out every year.

It's the fifth year of the Awards and this year is the first time the Judges agreed unanimously on the winner of the Grand Prix. Their collective quote? "The only unanimous winner the BEEAs has ever had. It is absolutely no insult to the other competitors to say he was head and shoulders above them – he was that good."

So what made him stand out to that extent? Let's hear what his nominator had to say. "For more than five years at Team Consulting, Sebastien has built an international reputation for the design, development and industrialisation of innovative, robust and capable medical devices. He is an accomplished engineer and system architect, providing the technical drive of high value product development projects in the highly regulated medical device industry. He has experience in all stages of the product development lifecycle, working with start ups as well as large organisations."

He was lead engineer for the



OrganOx perfusion system, pictured below, which keeps donor human livers 'alive' before being transplanted. But he has also been:

- System architect for a closed loop Class III safety critical system that continually monitors the subject's physiological parameters and reaction to the drug intervention during clinical trials.
- Project lead for the concept development of an innovative, low cost Lab on Chip bio sensor that detects serious or life threatening intravenous drug errors before they harm patients.
- Electrical engineer for the development of an in vivo intracellular injection needle system for the injection of a Hepatitis C DNA vaccine into muscle tissue, and
- Software lead for the development of a medical smartphone app measuring the respiratory rate of patient with sleep apnoea.

"He is an enthusiastic and dedicated engineer and is exactly the type of engineer that would be wanted and needed on a challenging, multidisciplinary medical device development project," the nomination continued.

One of the criteria the Judges examined when selecting the Design Engineer of the Year was the candidates' contributions to the design profession, in particular

working to inspire tomorrow's engineers.

And Sebastien impressed the Judges in this respect, working on a variety of community projects with schoolchildren and young engineers, looking to give them the skills needed to think through future challenges.



Examples include:

- Working with 'Engineers Without Borders' student groups, and
- Science Week for 100 children at a local primary school. Helping a Year 5/6 class to clean a litre of 'dirty' water. He coached and guided the children through the development stages that engineers face – 'Probably the hardest I've ever had to work'.

What the judges said:

"The only unanimous winner the BEEAs has ever had. It is absolutely no insult to the other competitors to say he was head and shoulders above them – he was that good."

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Inspired by innovation



Passionate about engineering

Heads up for the future

How taking a broader view of the design problem brings success



In identifying the Consultancy of the Year, the Judges looked for evidence of the speed with which projects have been developed, along with the range of technologies applied. Four companies reached the final stage and ByteSnap Design took the honours after some debate.

ByteSnap was formed in 2008 with the ambition of being the best embedded hardware and software consultancy in the UK. From modest beginnings, the company now has around 50 active clients. Turnover has risen significantly, as has its profit. Clients range from small UK firms – some of whom are coached through the product development process – to blue chip multinationals with specific embedded systems requirements.



We asked entrants to submit details of three recently-completed projects and ByteSnap put forward the MIST head up display system for motorcyclists, Sauven Markings' industrial inkjet printers, and the Guru Hub smart metering system.

ByteSnap believes it succeeds by taking a broader view of the problem. For the MIST system, it suggested a Windows CE-based design, which allowed the customer to develop the product from a 'one size fits all' device with a limited feature set into an expandable platform with options including audio, Bluetooth and GPS. The user interface could also be customised for different types of journey and for different markets.

One aspect which interested the Judges was how ByteSnap maintained a competitive position in its market. It said this is accomplished through training, development and recruitment.

What the Judges said:

"Core expertise applied to a range of projects."

"A hungry, forward-looking company which is also coaching its clients."

Internal projects allow engineers to improve their skills without affecting client work, while R&D is undertaken with selected partners. Recently, ByteSnap launched a graduate recruitment programme to help identify promising new engineers. Meanwhile, an open policy on continuous learning allows knowledge and innovations to be shared during regular meetings.

Using this approach, ByteSnap delivered an initial prototype for MIST within three weeks and the system is now in pre-production, with plans for it to be on the market by the end of 2013.

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Following a simple philosophy

Great technology that works well, is easy to use and meets customers' needs

Oxford Digital's entry to this year's BEEAs contained the following sentence, which could serve as a mission statement for the company as a whole: "The primary requirements are to make great technology that works well, is easy to use and meets the customers' needs." And this philosophy, essentially, is what won the company the coveted 'Small Company of the Year' Award.

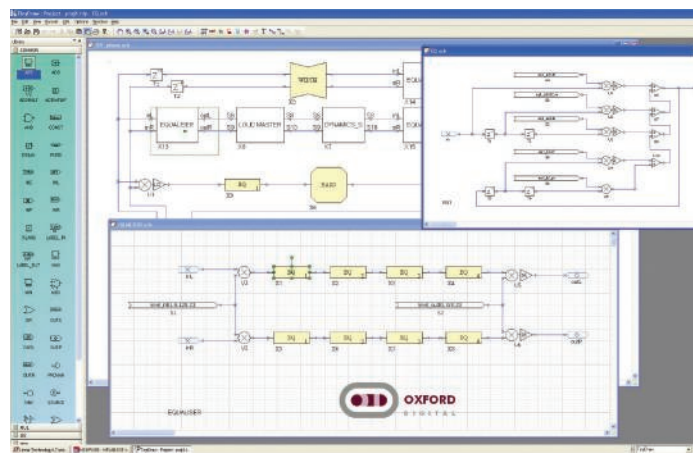
Oxford Digital was spun out of Sony by owners John Richards (CEO) and Peter Eastty (CTO) as an independent company specialising in digital audio technology in July 2006. Although it started as a consultancy without any IP, it has reinvested revenue to develop technologies that it now licence, including TinyCore: an audio DSP core and tool chain which has unique advantages in time-to-market, reduced maintenance costs, small silicon footprint and efficiency. TinyCore is used in asics in high volume applications and fpgas in low volume.

The company identifies unique selling points that will be compelling for the customer, usually through studying, simplifying and speeding up their workflow and reducing on-going support and maintenance costs.

The TinyCore audio DSP core's USP lies in its scalability, small silicon footprint and efficiency, while the workflow provides an intuitive, hierarchical graphical programming environment that produces fully optimised code that beats hand coded assembler for efficiency by about 10% and in a fraction of the time.

Going forward, the company is seeking to build the licensing business and to focus consultancy on supporting strategic sales of its licensed technology. It has innovative products and is engaged in discussions with customers on technology renewal for the next generation of products that will provide increased differentiation and broaden the scope of applications available for them.

It is also working with a number of semiconductor partners to promote its acoustic tuning solutions for their platforms and will be deploying the solution on other platforms over the coming year.



What the judges said:

"A growing business with huge licensing potential, particularly in the Asia-Pacific market"

"Consistent, market-tested innovation"

"A strong lead in the audio market"

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Start up doesn't feel the heat

Advanced materials set to have major
impact in thermal management

To win Start Up of the Year, a company has to cover a lot of ground in a very short space of time. Mere innovation isn't enough and neither is potential. The company has to demonstrate successful commercialisation of its products, too. This year's winner ticked all the boxes.

Versarien is focused on bringing to market advanced materials that are capable of having game changing impact on a variety of industry sectors. Based in Cinderford, it boasts a rapidly-growing workforce and has secured contracts with several blue-chip multinationals.

By taking inspiration from nature, the company has been able to bring an innovative, high performance thermal interface material to market. Thanks to its open cell micro-porous structure, this material has the capacity to radically change how thermal management is executed in modern electronic designs, as it is an order of magnitude more effective at transferring heat energy than conventional micro-channel heatsink solutions of equivalent size.

Versarien has targeted customers on several fronts – consumer markets in



the UK for initial revenue, medium-sized European enterprises for mid-term projects and large OEM customers for the longer term. Versarien has already secured its first commercial wins with sector-leading European thermal management businesses. It originally forecast its turnover would rise to £8.5million by year three and is on track to achieve this. Currently, the company has approximately 350 live enquiries to pursue, with a demand for samples and testing programmes.

The Versarien management team identified in its business plan the possible advantages of acquiring complementary businesses – envisaging that a substantial step in growth could be achieved, while being careful of the potential drain on cash.

The company has already acted on this, with its recent acquisition of Total Carbide from Elektron Technology for £2.3million.

What the Judges said:

“The company has been very aggressive and has, quite simply, gone further, faster than any of the other entrants”

“Developed an elegant solution to the problem of thermal management using a local workforce”

“They’re obviously proud of their region and of where they’ve come from”

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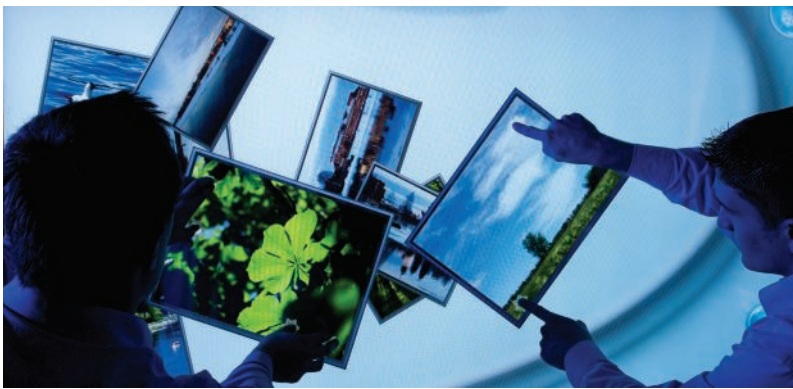
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Another dimension added to interfaces

Design team exceeds original goals as touchscreen scales to 85in formats



What the Judges said:

“Developed an impressive new technology addressing a growing market need”

“The team vastly exceeded the design specification”

The ability to harness a variety of skill sets, disciplines and personalities to create a successful end product is something that underpins great design, but can all too easily be taken for granted.

The Design Team of the Year Award is intended to redress this by recognising instances where significant obstacles and difficulties have been overcome to complete a major product.

In the case of Zytronic, that project was to develop a large format, ruggedised touch sensor with multi-touch operation. Until now large format multi-touch touchscreen were not able to be scaled to ultra large sizes and also cope with demanding application environments as the sensor

technology used was too vulnerable to physical harm from scratches, shocks and extremes of temperature. This was due to the inherent shortcomings of indium tin oxide (ITO), on which these sensors were based, as a conductive sensing medium.

Zytronic, through this ambitious design project, looked to bring a multi-touch sensor solution to market that had a true fully scalable sensor solution combined with a robust construction that could be applied to displays with much larger sizes than had previously been possible. It has long been accepted that ITO has certain limitations when being implemented into anything but small format consumer tasks.

The original goal was to product a solution that was able to support the detection of 10 touch point simultaneously and be able to be implemented onto displays with 22, 32 and 46in formats. These goals were

all reached on schedule and since then additional improvements have been made in order to allow 40 touch point detection and 85 inch display deployment – thereby exceeding the original goals set. Furthermore, the company is now able to apply this technology to curved LCDs and flexible films – thus adding another dimension to how human machine interfaces are implemented in non-consumer applications.

Congratulations to Land Instruments International, whose entry was Highly Commended by the Judges

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Meeting bottled up demand

Design cuts the amount of plastic needed for milk bottles and increases the recycled content



What the Judges said:

“The reduction in material used is very impressive and will have a significant environmental impact.”

“The company has a routemap to even greater reductions in a very high volume product.”

As consumers and companies alike become more environmentally aware, there has been a strong move to use the word ‘green’ in product marketing. So a definition of what is ‘green’ is important.

As far as the requirements for the 2013 BEEAs were concerned, ‘green’ related to such factors as the ability for a product to be recycled at end of life, the appropriate use of materials and consideration of the product’s carbon footprint.

This year’s winner of the Green Product of the Year went a step further by engineering an existing product to make it even ‘greener’.

The Infiniti milk bottle has been in use since 2012, with more than 160million sold through leading UK retailers. However, the dairy industry has been keen to cut its carbon footprint as the plastic milk bottle is one of the most widely used items of packaging.

Through a focused engineering approach, Nampak has reduced the weight of the four pint Infiniti bottle by 20% to 32g without affecting its integrity. This was achieved through a design that puts the handle on the corner, meaning that it does not force the material as far into each of the corners. Nampak has also created a version which includes up

to 30% recycled high density polyethylene (rHDPE). This has helped the industry to reach its target of including 30% rHDPE in bottles two years ahead of schedule. It’s estimated that this move will save the industry some 25,000 tonnes of material yearly.

Nampak estimates there has been a 50% reduction in the carbon footprint of milk bottles produced at its British plants since 2008, saving 113,000 tonnes of carbon overall.

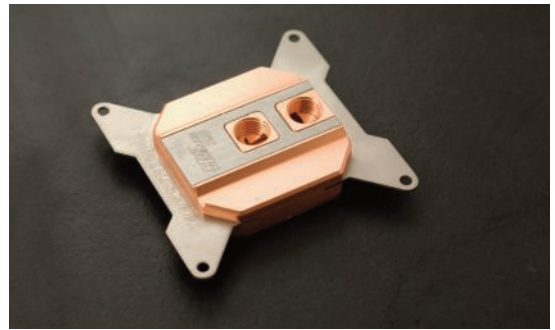
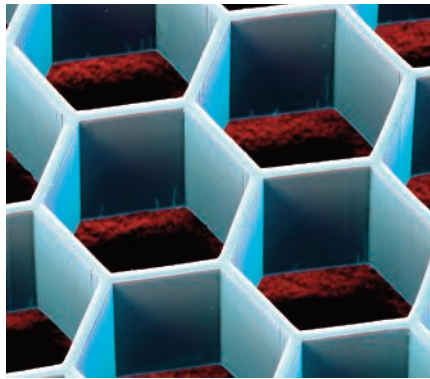
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Coating 'remembers' the temperature

Accurate profiling will help to bring better performance from high temperature applications

What you make a product from will directly affect its performance. For example, with a product in which there are high wear rates, a harder material will extend working life. But innovative use of materials can bring different benefits, including insight into what is happening within a device.

Sensor Coating Systems, set up in 2012, is a spin-off from research undertaken at Imperial College. Its technology, based on oxide ceramics, enables accurate temperature detection, corrosion and erosion monitoring and life time predictions on industrial components.

Oxide ceramics are suited to high-temperature applications such as thermal barrier coatings. But they are also suitable hosts for optical active materials, such as lanthanides. When suitably doped, the oxide ceramic not only becomes phosphorescent, it also demonstrates a 'memory'.

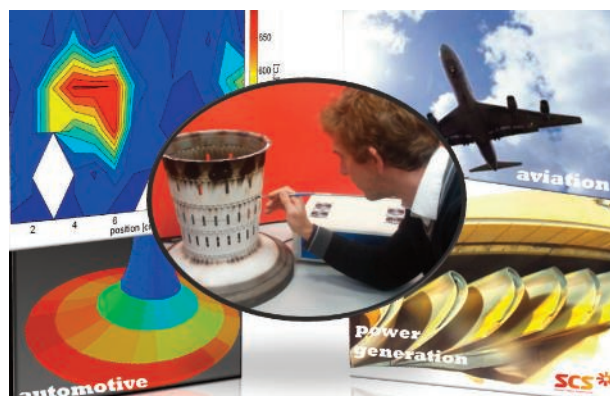
Applied as a thermal paint, the coating will change its structural characteristics with temperature and will retain a 'memory' of the

maximum temperature reached. The material can then be interrogated at room temperature using a hand held device in which excitation light stimulates luminescence. A simple look up table will then show the maximum temperature experienced to within $\pm 10^\circ\text{C}$.

Applications for the material include industrial turbines in the power generation industry, many components in the automotive industry, aero engines and machinery used in extreme environments, such as oil and gas plants.

The company has successfully launched an OEM User Club of gas turbine manufacturers, who are using Thermal History Coatings in their development processes to better understand temperature profiles in the hot section of the turbine – an area where other temperature detection methods have traditionally failed. The US Office of Naval Research has also funded a similar project and there is also interest from the automotive industry.

In 2012, the company received a Smart Award from the Technology Strategy Board to deliver low-temperature paint variants and has recently received a follow on grant to finalise the development, in collaboration with a UK paint manufacturer.



What the Judges said:

"A genuinely innovative materials technology with a wide range of potentially significant applications."

"This will help the development of more efficient, high-temperature systems, including turbines."

Congratulations to Versarien, whose entry was Highly Commended by the Judges

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Displaying innovation for HMI development

How an integrated solution takes the strain out of developing intelligent display systems



Since the BEEAs were launched in 2009, the Electronic Product of the Year has seen the most entries and the longest shortlists. This year saw seven finalists.

Our winner not only recognised the increasing importance of display technology in embedded systems, but also the design problems.

FTDI said that, in conventional intelligent display systems, a microcontroller creates and manipulates images pixel by pixel. A large flash memory is needed for storing the graphics library, plus a large frame buffer for processing the image content

and driving the display. If touchscreen operation is required, a controller needs to be included, while an audio d/a converter has to be included if sound is specified. It said this level of complexity would require 'considerable engineering resources'.

Its solution is the FT800, which allows easier implementation of intelligent display systems, with fewer components and less data being transferred within the system. Fewer components means a smaller system footprint and a reduction in the power budget. Because the device offloads tasks from the host microcontroller, designers may be able to specify a less expensive 8bit mcu, rather than a 32bit part.

The FT800 has an integral four wire touch controller and a single channel

audio controller, which supports high-quality sound. Applying the device enables a less complex design approach.

Addressing the graphical design issues, FTDI has collaborated with tool chain vendor MikroElektronika to offer software support through the Visual TFT graphic development platform. Using this approach, complex applications can be created by 'dragging and dropping' objects onto a palette.

The Judges were impressed by the FT800 being suitable for application in a range of non-consumer human/machine interfaces – from point of sale units and barcode scanners to building automation systems.

What the Judges said:

"Clearly a product with innovation."

"Impressive and minimalist... refreshing in these 'bloatware' times."

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Size matters

Platform brings predictable productivity
in difficult conditions

Size is important and the vast scale of the Fugro Seacore WaveWalker project was the first thing to impress the judges at this year's BEEAs.

WaveWalker is a 'Walking' jackup barge (self-elevating work platform – SEWP). The target market is any marine work operation which requires deployment of an SEWP, where operation with traditional SEWPs is uneconomic due to prevailing local swell and/or weather conditions, restricting ability to jack down into the water for platform moves and hence causing periods of standby or 'weatherdown', impacting both cost and programme on a project.

The platform is able to 'walk' in the X and Y directions, by using two sets of conventional jacking legs mounted on sliding bearings and attached to the hull by integrated 'bull-rails'. Each step of the walking process is 4m. By this means, the vessel is able to move in an elevated condition without the requirement to jack down into the water, thereby remaining operational in conditions where conventional jackups would be 'waiting on weather'. In some locations and environmental



conditions, the jackup is also able to walk to areas of safe haven without the requirement for the use of tugs and similar support vessels in the event of deteriorating weather.

The market objectives were to provide a 32 x 32m platform capable of supporting a 400-tonne payload and walking at up to 40m/hr (ground conditions permitting). WaveWalker has completed its first tranche of drill and blast works for development of the Suape Outer Channel, operating successfully in ground conditions far more onerous than those originally envisaged or specified. The market objectives have been met fully and WaveWalker is now attracting interest from a number of potential high-profile clients who have visited to witness the machine operating in real site conditions.

What the Judges said:

"The sheer scale of it is simply amazing"

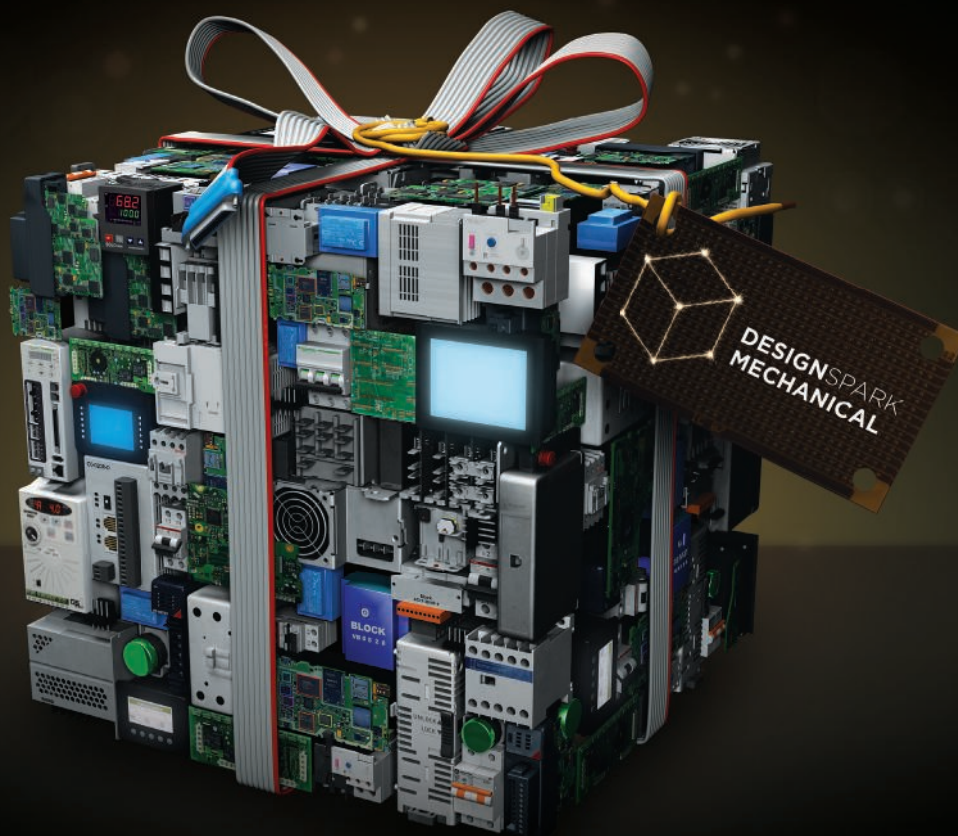
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"Innovation on an absolutely massive scale!"

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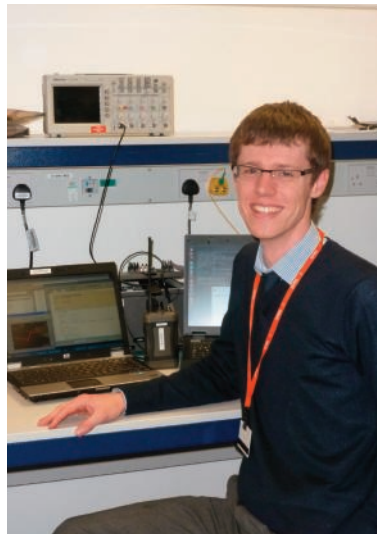
Jack Bolton was the outstanding candidate in this fiercely contested category

The ability to learn quickly is a key differentiator in any young engineer. However, even more important is the ability and willingness to teach oneself and show initiative. It was this factor that really allowed Jack Bolton to win this category.

The recurrent theme of Jack's entry was him acquiring new skill sets to enhance his capabilities – usually by dint of teaching himself. For instance, when tasked with testing new software builds on radio hardware, Jack saw that the tests required were very time-consuming and, if automated, could be run overnight; effectively halving the required test time. He thus proceeded to research and teach himself how to use a free automation language, which he promptly used to automate one of the simpler tests as a proof of concept.

After his initial year with Selex, Jack went to University of Surrey, where he completed an MEng in Electronic Engineering, working for the company out of term time. The company set Jack his dissertation topic 'Developing a Military Communications Headset to Improve the Situational Awareness of the User'.

For his dissertation, Jack taught



himself MATLAB, allowing him to fully model the audio processing required for his proposed solution.

Due to Jack's dissertation he was tasked with the development of the code for an audio processing DSP, to provide active hearing protection to the user. While developing this DSP capability, Jack also took it upon himself to design and build a fully working prototype of a standalone hearing protection system. This product removed the need for a radio interface for the hearing protection to function, integrating a battery, charger and an audio input. The company currently does not have a product with this capability. He completed all this outside of work hours and is in the process of

What the Judges said:

"Jack was an outstanding entrant in the most fiercely competitive category"

"He comes across as extremely driven"

"The work he has put into training apprentices is an example to us all"

Congratulations to Rosie Linehan and Adam Malpass, whose entries were Highly Commended by the Judges

making a business case to develop the standalone product.

Jack is engaged with the engineering community and is constantly pushing to develop and promote engineering inside and outside the company. He is a member of the Chelmsford Science and Engineering Society and has been voted in as the president of its younger branch; Future Engineers and Scientists.

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Challenging approach pays dividends

An international reputation for the design, development and industrialisation of innovative medical devices

The days when design engineers could address themselves solely to designing have largely passed.

Today, designers need to have a number of strings to their bow: commercial awareness is one of the more obvious. Increasingly, designers need to broaden their horizons beyond their immediate working environment. And that's an important attribute for anyone working in a design consultancy.

The Judges also wanted to see engineers who have contributed to the industry – by participating in standards bodies, for example, or by working with future engineers.

For more than five years, Sebastien Cuvelier Mussalian has worked at Team Consulting as a senior engineering consultant. During this time, he has developed an international reputation for the design, development and industrialisation of innovative and robust medical devices.

Perhaps the most challenging task he has faced is the development of the OrganOx liver perfusion system,

which keeps human livers 'alive' and fully functioning during the transplant process.

He is also helping Team Consulting to respond to growing demand to develop smartphone based healthcare applications. According to nominator Stuart Kay, this was made all the more challenging as the regulator's guidelines were changing continually.

A strong project and technical leader, he challenges and encourages his peers and team members to improve themselves. He has developed or updated a number of design approaches and processes within Team Consulting, including a 'leaner' method of equivalence testing for the US FDA 510(k) process.

Sebastien has worked on a variety of community projects with school children and young engineers; not only to inspire them to become engineers and scientists, but also to give them the skills to think through challenges. Alongside participating in 'Engineers Without Borders' Sebastien has recently taken part in a Science Week at a local primary school, where he led a Year 5/6 class in solving the challenge of cleaning a litre of 'dirty' water; something he said was 'probably the hardest I've ever had to work'.



What the Judges said:

"Quite simply, he's good across the board."

"The OrganOx project stands out as a complex, multidisciplinary challenge."

"A strong leader who clearly takes time to develop his team."

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Eric Wilkinson, Chairman

Chief operating officer for Cambridge Consultants, Eric has managed projects as diverse as the latest in anti terrorism radar and the world's most intelligent iron.



Andrew Burrows

Winner of the 2009 BEEAs Grand Prix, Andrew set up i20 Water in 2005 to develop technology that would reduce leakage and burst frequency in water networks.



Justin Cunningham

With a first class honours degree in Aerospace Engineering, Justin is currently editor of *Engineering Materials* and deputy editor of *Eureka*.



Ashley Evans

Ashley Evans is chief executive of the Electronics Technology Network. Prior to leading the ETN, Ashley was chief executive of Electronics Scotland and inaugural chair of the UK Electronics Alliance.



Paul Fanning

Paul Fanning has been a trade and technical journalist for 18 years. During this time, he has edited a number of industrial titles and took over as editor of *Eureka* in January 2010.



Phil Mayo

Phil founded Premier EDA Solutions, is a visiting industrial fellow at the University of Hertfordshire and a member of the University's Industrial Advisory Group.



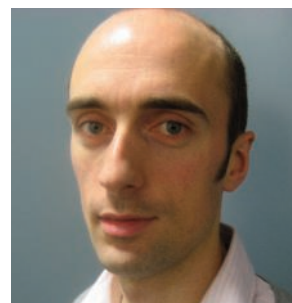
Philippa Oldham

A chartered mechanical engineer, Philippa joined QinetiQ as a mechanical design engineer and became product manager for its aerospace business. In May 2011, Philippa moved to the IMechE.



Graham Pitcher

An engineer by training, Graham has covered developments in the electronics industry for more than 30 years.



James White

Design Engineer of the Year for 2012, James White has worked for Caterpillar since graduating designing structures, hydraulics and systems for use on the company's products



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More growth for 2014

When Findlay Media announced last year that it was tripling the size of the Engineering Design Show in 2013 by launching the Electronics Design Show and expanding the Design for Manufacture section to create Engineering Materials Live!, there was a deal of scepticism about whether a newly-launched event could be grown that quickly.

While 2012's event occupied one hall at Coventry's Rioch Arena – with a

the doors – with more than 1000 engineers visiting the inaugural Electronics Design Show. Few people expected these targets to be met, let alone beaten.

When the Electronics Design Show was launched, Findlay Media said it was an idea whose time had come. The success of the event justifies that claim. Ed Tranter, executive director of Findlay Media, said: "Our aim in launching the Electronics Design Show was to provide something that hasn't

"We really believe that we have developed an event that is a positive force for the UK's design engineering community."

Ed Tranter, Executive Director, Findlay Media

floor space of 2000m² and 80 stands – this year's event took up 6000m² and hosted more than 170 exhibitors, along with four show floor workshop theatres.

We set ourselves the target in 2012 of attracting 1,000 visitors over the two days of the Show. When the doors closed on the second day, more than 1,600 people attended. This year, the target was 2,500 and we exceeded that comfortably, with more than 3,100 engineers had passed through

been available in the UK – a high quality national event organised for electronic design engineers. And we delivered on that."

But we're not going to leave it there. There will be another 1000m² of floor space added in 2014 to house the Embedded Design Show. This brand new event will link suppliers of embedded software and hardware with design engineers, allowing the latest thinking in this crucial sector of electronics design to be shared.



And it's not expansion for the sake of expansion; the embedded sector is an increasingly important part of the electronics industry. Just like the Electronics Design Show, we'll be making sure it offers embedded designers the best combination of keynotes, workshops and suppliers.

Meanwhile, the Engineering Design Show, the Electronics Design Show and Engineering Materials Live! will continue to offer best practice learning and practical design ideas for visitors

Design Shows in 2014

Embedded Design Show launched

To find out more about our plans for 2014 or to book your space in one of next year's events, visit
www.engineeringdesignshow.co.uk
www.electronicdesignshow.co.uk
www.embeddeddesignshow.co.uk
www.engineeringmaterials.live.co.uk



through carefully organised conference and workshop sessions.

Both the Engineering Design Show and Electronics Design Show Conferences will feature 16 sessions over two days, while each show will include a workshop programme with 20 practical and technical sessions.

Hosting three events under one roof – and adding a further event for 2014 – is the embodiment of Findlay Media's ambition to offer design engineers a comprehensive event

focusing on their needs.

Tranter said: "Findlay Media is committed to bringing high quality information and learning to engineers and we really believe that we have developed an event that is a positive force for the UK's design engineering community."

The inaugural Engineering Design Show in 2012 was great; the expanded event in 2013 was even better and we believe that 2014 will be better still. We look forward to seeing you there.

Engineering
design show

Engineering
Materials
LIVE!

electronics
design show

embedded
designshow

“To have a great idea,
have a lot of them.”

Thomas Edison



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In 2013, there were:

- Over 180 market-leading suppliers
- Over 3,000 design engineer visitors
- 35 practical workshops
- 25 keynote speakers



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22 - 23 October 2014 • Jaguar Exhibition Hall • Ricoh Arena • Coventry

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